ASSESSMENT OF COFFEE IMPORT TO AUSTRALIA FROM INDIA AND INDONESIA

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ABSTRACT:

Australia is among the major coffee consumers. Local industry, which started to establish around a century ago, is not currently in a position to meet local demand. Accordingly, Australia has to import its coffee from other countries. In this paper, we have presented an analysis on the feasibility of importing coffee from India and Indonesia. Research suggests that it is feasible to import from either of these countries. However, the decision in this regard has to be based on analysis of a broader portfolio of coffee exporters from these countries, logistics mechanisms, labour rates from exporting countries, social and environment practices and other relevant factors.

INTRODUCTION:

Coffee is the world's second most valuable traded commodity, behind only petroleum. Over 2.25 billion cups of coffee are consumed in the world every day and over 90% of the coffee in those cups is produced in developing countries while consumption happens mainly in the industrialized economies (Stefano Ponte, 2002).

Faris Alkhateeb explains the history of coffee as follows (Alkhateeb, 2013):

> According to the historical record, in the 1400s coffee became a very popular drink among Muslims in Yemen, in the southern Arabian Peninsula. The legend goes that a shepherd (some say in Yemen, some say in Ethiopia) noticed that his goats became very energetic and jumpy when they ate beans from a particular tree. He had the courage to try them himself, noticing they gave him an energy boost. Over time, the tradition of roasting the beans and immersing them in water to create a sour yet powerful drink developed, and thus, coffee was born. Regardless of whether or not the story of the shepherd ever really happened, coffee found its way from the highlands of Yemen to the rest of the Ottoman Empire, the premier Muslim empire of the 15th century. Coffeehouses specializing in the new drink began to spring up in all the major cities of the Muslim world: Cairo, Istanbul, Damascus, Baghdad. From the Muslim world, the drink found its way into Europe through the great merchant city of Venice. Although it was at first denounced as the “Muslim drink” by Catholic authorities, coffee became a part of European culture. The coffeehouses of the 1600s was where philosophers met and discussed issues such as the rights of man, the role of government, and democracy. These discussions over coffee spawned what became the Enlightenment, one of the most powerful intellectual movements of the modern world. From a Yemeni/Ethiopian shepherd to shaping European political thought to over 1 billion cups per day, this Muslim innovation is one of the most important inventions of human history.

Coffee was first grown in Australia over a century ago, without much economic success. Australia, now, is ranked 42nd in the world for coffee consumption at 3kg per capita (Campbell, 2015).

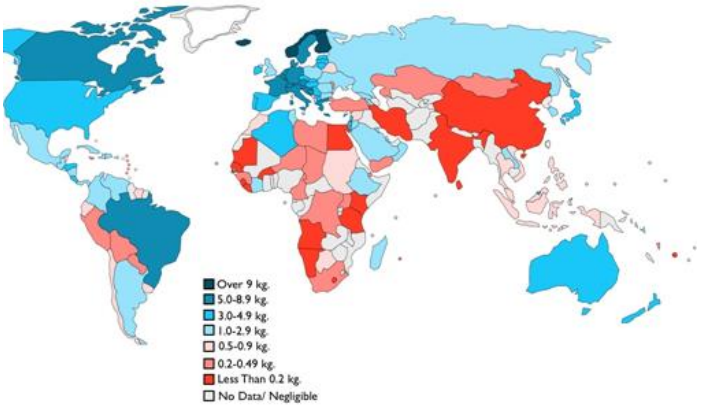

Figure 1: World Coffee consumption comparison

Australians are drinking more coffee than ever but the challenge for entrepreneurs is finding the profitable part of the chain (Fitzsimmons, 2014). It is important to note that local growers produce about 200 tonnes while about 435 times this quantity is imported (Edwards, 2015). The high cost of labor made commercial coffee growing unprofitable until mechanical harvesting became common in the 1980s. Though in overall terms, the current level of production in Australia is very small. But over a passage of time, there has been an improvement and a growth trend. Another interesting point to note is that the half of the locally produced coffee is exported, however, it is such a small amount that it does not even get listed in the International Coffee Organization's production statistics. There has been an investment in the specialty coffee industry in Australia along with increasing market presence.

There is a variation in the reports about exact quantity of coffee imports due to various forms in which it is imported however, there is absolutely no doubt that an extremely large volume of it, as compared to locally grown coffee, needs to be imported. This is also shown by the import trends which show steady growth over the years.

Table 1: Coffee Bean Imports to Australia since 2003

Market Year	Bean Imports	Unit of Measure	Growth Rate
2003	670	(1000 60 KG BAGS)	NA
2004	735	(1000 60 KG BAGS)	9.70 %
2005	790	(1000 60 KG BAGS)	7.48 %
2006	830	(1000 60 KG BAGS)	5.06 %
2007	885	(1000 60 KG BAGS)	6.63 %
2008	910	(1000 60 KG BAGS)	2.82 %
2009	950	(1000 60 KG BAGS)	4.40 %
2010	1035	(1000 60 KG BAGS)	8.95 %
2011	1110	(1000 60 KG BAGS)	7.25 %
2012	1135	(1000 60 KG BAGS)	2.25 %

2013	1180	(1000 60 KG BAGS)	3.96 %
2014	1185	(1000 60 KG BAGS)	0.42 %
2015	1310	(1000 60 KG BAGS)	10.55 %

("Australia Green Coffee Bean Imports by Year (1000 60 KG BAGS)," 2016)

With such high percentage of import, it is important that we use the most feasible sources to ensure maximization on our return on investment and minimizing the cost of imports. This paper will accordingly review the feasibility of importing coffee from India or Indonesia.

COUNTRY OVERVIEW:

In order to better explain the import aspects related to India and Indonesia, it is useful to have a broad overview of GDP of the three countries under consideration in this paper.

AUSTRALIA:

Following is a broad overview of Australian GDP and its components.

The relationship between 'Exports', 'Imports', 'Private Consumption', 'Private Investments' and 'Government Expenses' is shown by a parameter known as GDP. It is, mathematically, represented as: GDP = C + I + G + (EX - IM), where C = private consumption, I = private investment, G = government expenditure, EX = exports of goods and services, IM = imports of goods and services

Figure 2 shows the composition of Australian GDP.

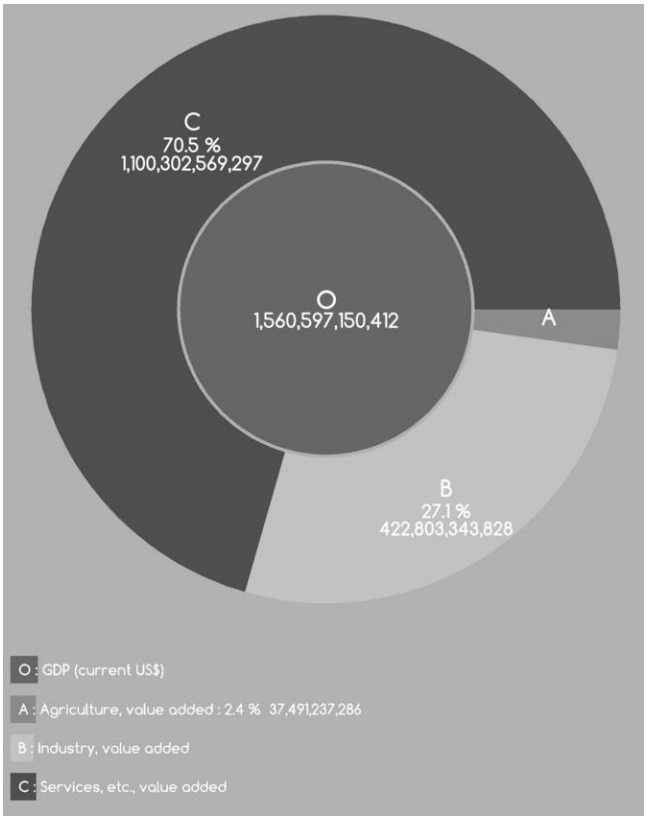

Figure 2: Australian GDP Composition ("Australia," 2015)

Australia's Major Agricultural Products are as follows:

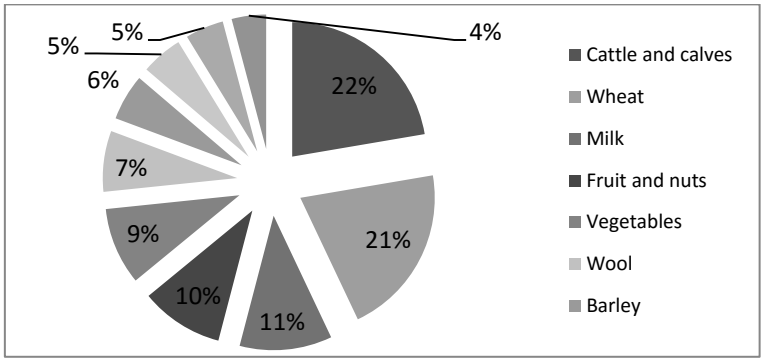

Figure 3: Australian Agricultural products

Australian Agriculture is highly dependent on food exports - 58 per cent of the total food product is sold overseas, generating 70 per of the sector's total value (Nunzio, 2014). However, we do not see coffee in this chart which re-emphases the point that local production is not sufficient to meet coffee demands and import is a necessary option.

INDIA:

Following is breakdown of India's GDP:

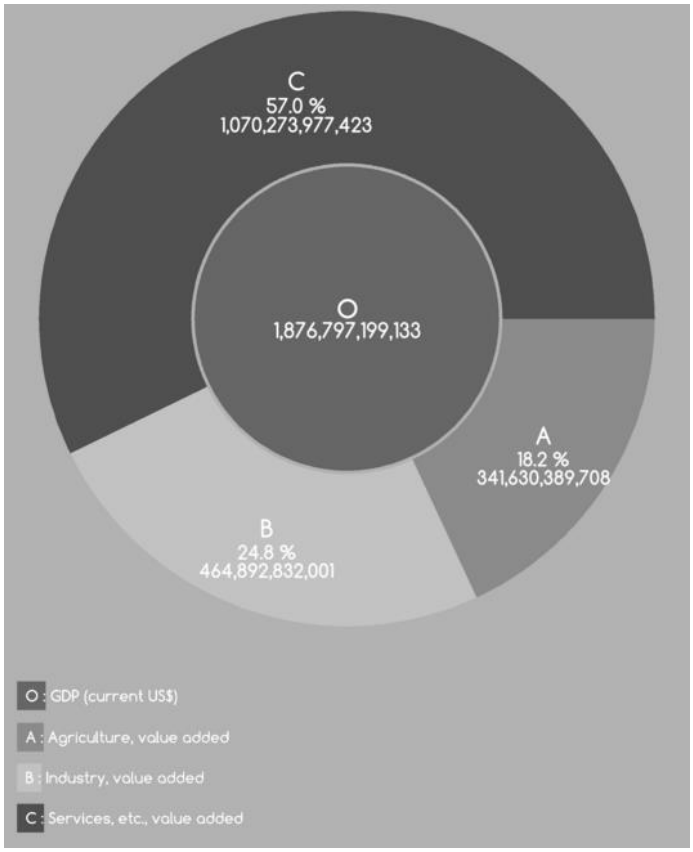

Figure 4: Components of Indian GDP ("India," 2016)

As compared to Australia, India has significantly higher contribution from Agriculture and industry, whereas services sector, though strong, is much lesser in percentage as compared to Australia. The economy of India is the tenth-largest in the world by nominal GDP and the third largest by purchasing power parity (PPP). India is the nineteenth largest exporter and tenth largest importer in the world. The industry employs 14% of the total workforce. India is 11th in the world in terms of nominal factory output according to data is compiled through CIA World Factbook figures.

INDONESIA:

GDP breakdown for Indonesia is as follows:

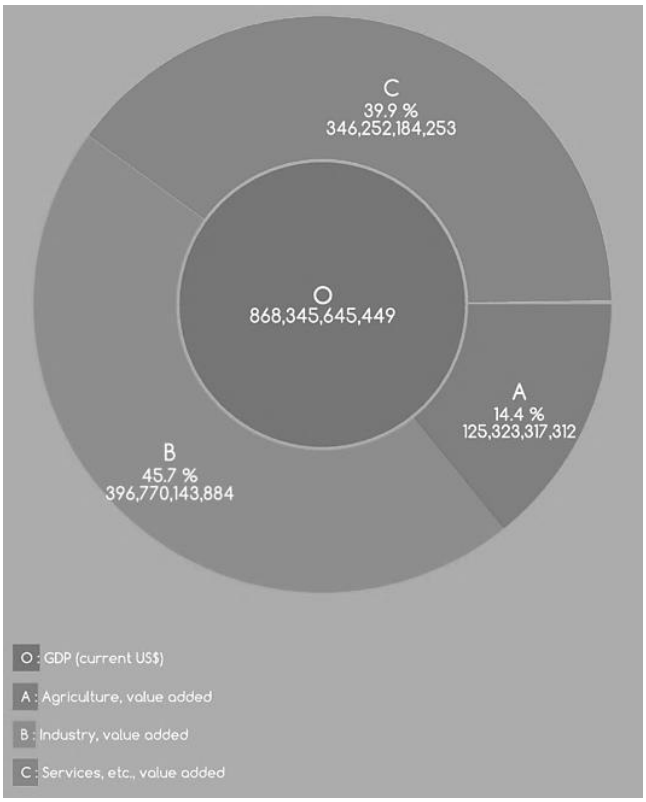

Figure 5: Components of Indonesian GDP ("Indonesia," 2016)

Contribution from Industry, value-added, is highest in the case of Indonesia in comparison to Australia and India. Indonesia has the largest economy in Southeast Asia and is one of the emerging market economies of the world. The country is also a member of G-20 major economies and classified as a newly industrialised country.

Indonesian GDP per capita is expected to double by 2020 (Anwar, 2014).

FEASIBILITY FROM SUPPLY CAPABILITY POINT OF VIEW:

Coffee that is sold on the world market is usually a combination of roasted beans of two botanic types: arabica and robusta. The difference between these two types mainly lies in its taste and the level of caffeine. Arabica beans, more expensive on the world market, have a milder taste and contain approximately 70 percent less caffeine than robusta beans ("Coffee in Indonesia - Production & Export Indonesian Coffee," 2015). Arabica is the more common type of bean grown (70

percent of coffee is Arabica), and it's considered more flavourful. Robusta is hardier and cheaper, most commonly seen in instant coffee jars. Robusta coffee is a variety of coffee, which has its origins in central and western sub-Saharan Africa. It is a species of flowering plant in the Rubiaceae family. Robusta is also an important part of traditional espresso blends, where it adds characteristic flavours. Robusta is mostly used in instant coffee and other manufactured products.

Whereas, coffee arabica is a species of coffee originally indigenous to the mountains of the southwestern highlands of Ethiopia. It is also known as the "coffee shrub of Arabia", "mountain coffee" or "arabica coffee". Coffee arabica is believed to be the first species of coffee to be cultivated, being grown in southwest Arabia for well over 1,000 years.

The subtropical and equatorial regions provide good conditions for coffee to be grown. Therefore, countries that dominate the world's coffee production are found in South America, Africa, and Southeast Asia.
Following is an overview of the global coffee production.

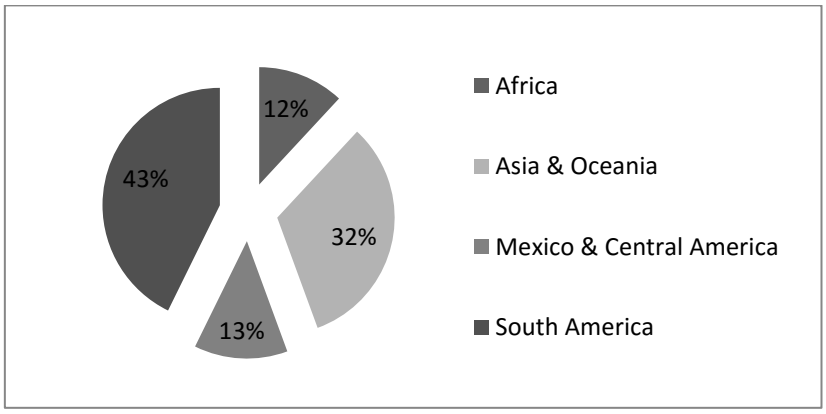

Figure 6: Global Coffee Production

We see that major producers, as regions, are 'South America' and 'Asia and Oceana'.

Following is an overview of top six individual countries in this mix:

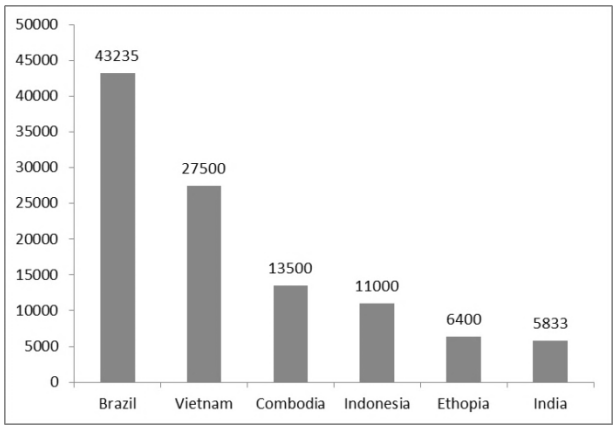

Figure 7: Top Six Coffee Producing Countries (ICO, 2016)

This chart provides us valuable insights regarding the major producers. However, this is not the complete picture. In order to make the import decisions, we also have to see the volume they have

available for the export market. This would be governed by the comparison between their local demand and their production output. Following table provides useful insights into this aspect.

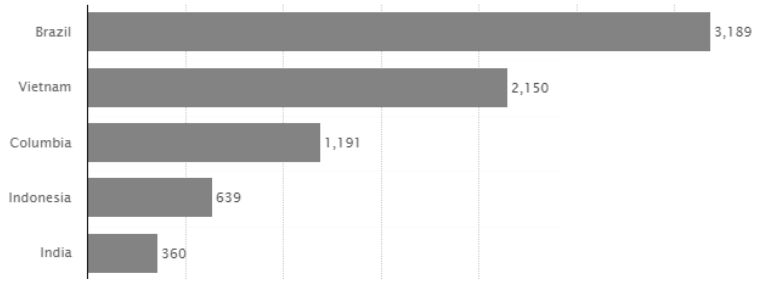

Figure 8: Top 5 coffee exporters – 1000 x 60 kg bags ("Export volumes of coffee-producing countries, 2015 | Statistic," 2015)

From this chart, it is very evident that after satisfying local consumption, both the countries under discussion, India and Indonesia can satisfy the local demand very comfortably with spare coffee to continue exporting to other countries.

FEASIBILITY FROM LOGISTICS POINT OF VIEW:

In this section, we will discuss imports from India and Australia from logistics cost point of view by using the geo-maps.

Coffee exports from India:

Almost 80% of the country's coffee production is exported, 70% of which is bound for Germany, Russian federation, Spain, Belgium, Slovenia, United States, Japan, Greece, Netherlands, and France. Italy accounts for 29% of the exports. Most of the export is shipped through the Suez Canal.

Figure 9: Broad Geomap of Indian Exports

Geo-map constructed for major Indian export markets suggest that Australia can be a more cost-effective option for Indian exporters as compared to some far off customers. From an Australian perspective, it means that Indian exporters may be able to offer better prices to Australian importers due to reduced logistics expenses.

A report produced by Ministry of Agriculture, Government of India on 'Coffee Export from India', it is mentioned in the conclusion that it would be a preference for Indian Coffee Industry to capture high price markets including Australia (*Coffee export from India*, 2013).

Coffee exports from Indonesia:

Most of Indonesia's robusta is used in instant coffee and other manufactured products. The domestic market consumes about 150,000 metric tons of robusta annually. The main markets are Philippines, the United States, western Europe, and Japan, (Anwar, 2014) although demand from emerging markets such as Russia, China, Taiwan, South Korea and Malaysia is increasing.

Figure 10: Broad Geomap of Indonesian Exports

The geo-map shows that the best export option for Indonesia is Australia due to closer proximity. This is also true for Australia as it would mean much lower logistics prices, lesser lead times and accordingly less inventory. It is evidently a win-win situation if all other associated conditions work well too.

Australian Imports:

Australia imports both Arabica and robusta varieties. Arabica varieties are offered in most cafes through freshly ground beans. Instants coffees, on the other hand, use Robusta. Demand for robusta

has slightly declined (42% to 38%) in the last few years with more customer going for arabica coffee (Boothroyd, 2013).

Traditionally Australia imports bean from PNG, (35%). Vietnam is now the second biggest coffee supplier to Australia, followed by Indonesia, Brazil, India, Thailand, Colombia and Costa Rica (*NSW Coffee Industry Report*, 2013).

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Figure 11: Broad Geomap of Australian Imports

This shows that Australia is importing coffee from a number of countries including Indonesia and India. However, some of the importers are from Americas which means higher logistic cost. If market shift happens in the coming year and suppliers get contracts from locations nearer to them, it would globally reduce the logistic expenses and would provide better price structure for the importers.

From the geo-mapping, we infer that Indonesia is a more suitable option to import coffee from.

FEASIBILITY FROM VARIETIES AND QUALITY POINT OF VIEW:

From Indonesia, we know that both Arabica and Robusta varieties are produced in significant quantities, as shown in the graph below.

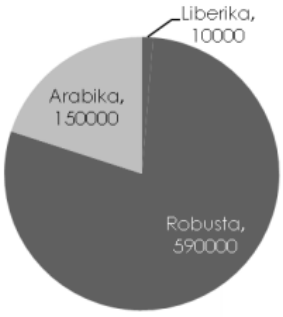

Figure 12: Approx. Production of Coffee in Tons (Anwar, 2014)

In addition to this, Indonesia also produces some speciality Coffee varieties which are unique to it and not found anywhere else. This can be an added advantage for Australian speciality coffee market.

India also produces both Arabica and Robusta varieties. 70% of exports from India are Robusta (Parija, 2015) which is approximately the same as Indonesia. However, as Indonesian production is almost double as compared to India, it means the higher potential to supply varieties required in Australia. However, in 2015, Arabica exports from Indian plunged due to pest attacks and varying price. While the robusta shipments increased 23%, exports of arabica fell 26% (Krishnakumar, 2016).

This aspect of Indian market shows a risk with regards to quality and sustainability of supply. On the other hand, Krishnakumar mentions that shortage of supply from Brazil is made up by Indonesia, Vietnams, and other big suppliers.

Coffee Prices:

The International Coffee Agreement (ICA) is an international commodity agreement aimed to achieve a reasonable balance between the supply and demand of coffee at a higher price than would otherwise be the case. Export quotas are the principal instruments used.

ICO established the indicator price system in 1965 to provide a reliable and consistent procedure for reporting prices for different types of coffee, as well as an overall or composite price which would reflect aggregated daily movements in the price of coffee. The ICO indicator price system is based on the four separate price groups:

- Colombian mild arabica
- Other mild arabica
- Brazilian and other natural arabica
- Robustas

Prices for these varieties are different. Robusta is the lowest priced variety.

The international coffee prices fluctuate depending on a number of factors (however, this fluctuation is not transferred to customers that often due to a number of intermediate layers of processing before it reaches the end-customer).

Carrier (2013) has explained the price fluctuation and factors that affect it. He has mentioned that pricing is driven up and down by variables like changing weather conditions in the major producing countries, political turmoil, speculation about production levels, changing transportation costs (which is governed by oil prices) and other unexpected factors. That word, “unexpected,” is key. For example, news of a possible drought or freezing conditions in coffee-producing areas would likely reduce global supply and thereby increase prices. Assuming demand stays the same, the decreased supply would drive up prices in order to achieve a market-clearing price.

As the coffee prices are set globally, it is not important that which country it is imported from in terms of pre-logistics price. However, what would matter is the mix of varieties required by importers and logistics expenses involved. As a strategy, it would beneficial for Australian importers

to work closely with neighbours like Indonesia and growing and importing better quality and right variety of coffee.

CONCLUSION:

Through this paper, we have seen that both India and Indonesia have enough coffee production and export capacity to meet Australia's coffee import requirements. In terms of logistics, it is beneficial for both the countries to export to Australia rather than some of their distant customers. This would result in lower logistic costs for both countries and accordingly lower price for Australia. However, Indonesia seems a more preferred option in terms of distances involved. From the perspective of varieties, both the countries are able to fulfil Australian requirements. However, risk factor with India is higher. Based on this, we recommend, Indonesia is a more preferred option.

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